

# Ballard Technology

## Databus for Test, Simulation and Embedded Environments

For more than 20 years, Ballard Technology has been a pioneer and innovator of avionics databus solutions. Ballard has consistently demonstrated its commitment to customers by aggressively developing innovative board, box and software products for the test, simulation and embedded environments.

Avionics databus interfaces are Ballard's only business and strategic focus. They provide single and multi-protocol interface and box solutions for MIL-STD-1553, ARINC 429, 629, 708, 717, AFDX, CSDB, serial-links and other databuses. Its commitment to high-quality, easy-to-use products and to providing exceptional customer support, has earned it the loyalty of industry, military and government customers worldwide.

### Board and Box Products

Ballard's board level products are available for PCI, cPCI, PMC, PCMCIA, PC/104 and VME backplanes. The modular design of its OmniBus family of products offers the highest level of flexibility, high channel counts and on-board processors for exceptional performance.

Ballard pioneered a new approach to avionics test and simulation with the introduction of its popular OmniBus-Box product line — a flexible networked or USB alternative to "plug-in cards." These compact, versatile and simple-to-use, stand-alone boxes provide easy accessibility, multi-protocol support and efficient processing, all with short COTS lead times.

With internal PowerPC processors, Ethernet and USB connectivity and compact construction, these OmniBus-Box products open new possibilities for networked and stand-alone applications.

Ballard generated excitement in the industry with its Avionics BusBox — a new class of box level products that are available in two versions. The AB1000 series is a small, lightweight embedded



computer with interfaces for standard peripherals and a variety of avionics databuses. The AB2000 Series is a more rugged version with DO-160 validation and conduction cooling that makes it ideal for harsh environments. The heart of the Avionics BusBox is a user programmable PowerPC processor. The AB1000 and AB2000 are well suited for data conversion, recording or data server applications, and because they are COTS products, they are attractively priced.

The Avionics BusBox family of products supports a wide variety of protocols and I/O including MIL-STD-1553, ARINC 429/708/717, RS-232/422/485, Ethernet (10/100), USB, mass storage, Discrete I/O and provides a PMC expansion slot for additional flexibility.

### Test and Embedded Solutions

With a long tradition of offering quality avionics test and simulation boards and software, Ballard has earned the trust of developers and technicians worldwide. Its commercial and military customers have characterized their products as "the boards that work." Now, adding to the history of board-level applications, the Avionics BusBox family and other rugged products greatly expand Ballard's offerings to the embedded market, including flight-worthy requirements.

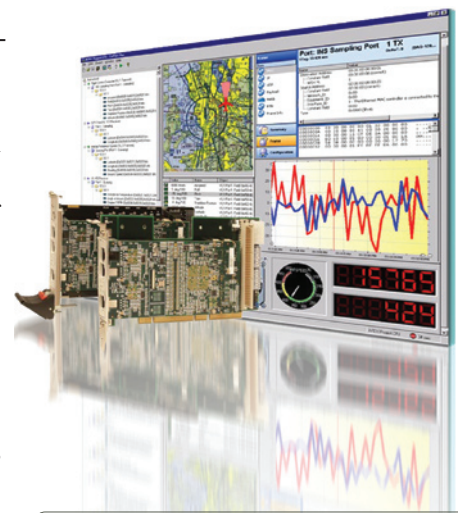
### Software — When Productivity Counts

Ballard understands its customers' engineering and professional staffs are a critical and costly resource. Consequently, software engineers at Ballard

are constantly looking for ways to make their customers' jobs easier. CoPilot, the company's industry-leading data analysis and simulation software, helps customers achieve their objectives quickly and efficiently, and Ballard's high-level API (Application Programming Interface) also eliminates the need for tedious programming.

CoPilot is an intuitive, easy-to-use, bus analysis and simulation software program that simultaneously supports multiple protocols and I/O environments. This powerful Windows-based application software interfaces to MIL-STD-1553, ARINC 429, ARINC 708, ARINC 664/AFDX and serial avionics databuses.

With data archiving, engineering unit conversion, virtual instruments and easy-to-read reports, scripting and over-the-net functionality, CoPilot's powerful features facilitate productivity and bring ease-of-use to test, simulation and embedded applications.



### Contact Information

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